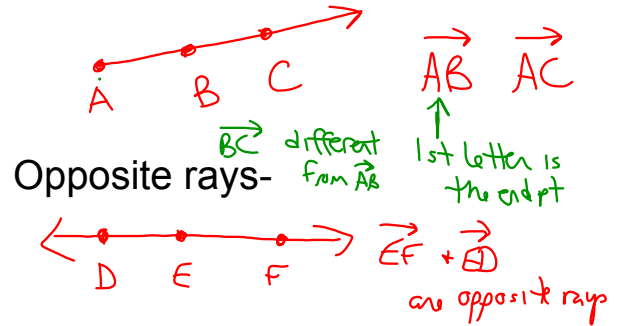
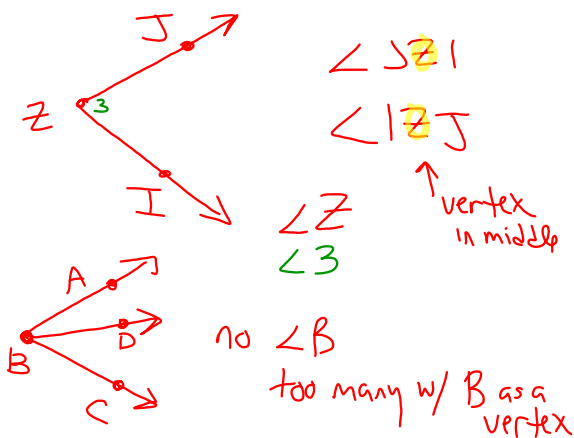


# 1-4 Angle Measure

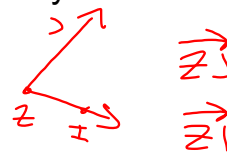
Ray-one endpoint; extends infinitely in one direction



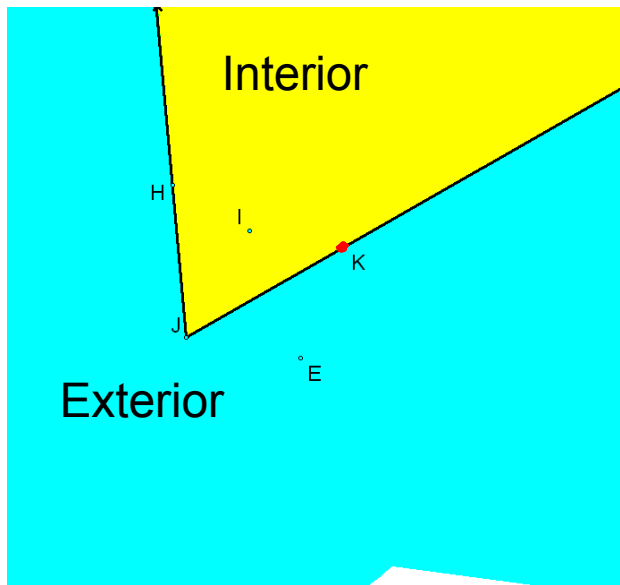
Angle-figure formed by 2 rays with a common endpoint



Rays are the sides of an angle

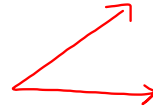


Common endpoint is the vertex

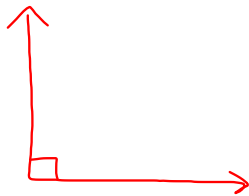


### Classifying Angles

Acute angle-measures between  $0^\circ$  and  $90^\circ$



Right angle-measures  $90^\circ$



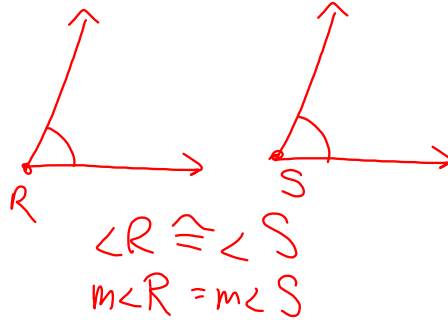
Obtuse angle-measures between  $90^\circ$  and  $180^\circ$



Straight angle-measures  $180^\circ$



Congruent angles-angles that have the same measurement



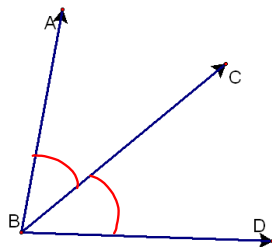
Angle Bisector-ray that divides an angle into 2 congruent angles

BC bisects  $\angle ABD$

$\angle ABC \cong \angle CBD$

$m\angle ABC = m\angle CBD$

$m\angle ABC = \frac{1}{2} m\angle ABD$



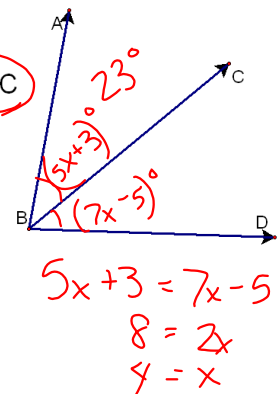
ex: Solve for x.

Find the  $m\angle ABC$

$\overrightarrow{BC}$  bisects  $\angle ABD$

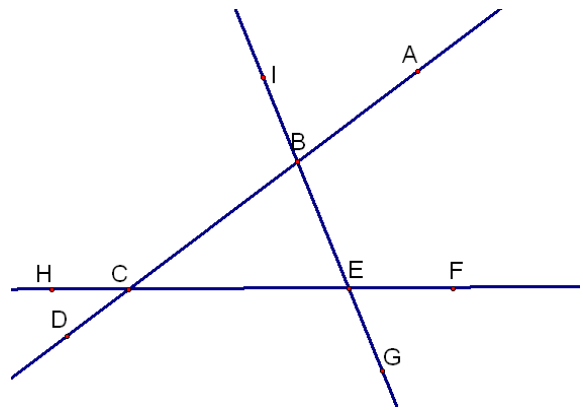
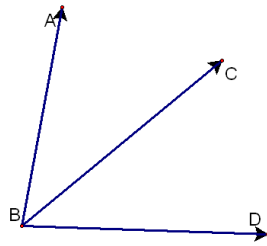
$m\angle ABC = 5x + 3$

$m\angle CBD = 7x - 5$



ex: Solve for x.

→  
BC bisects  $\angle ABD$   
 $m\angle ABC = 10x + 12$   
 $m\angle CBD = 64$



HW p34 #s 12-37  
(ignore measuring)